

# MEETING MINUTES



MINUTES OF: Arrow Surat Community Reference Group  
 HELD AT: BMO, Dalby  
 DATE: 26 February 2015  
 COMMENCEMENT TIME: 11.10am

<b>PRESENT:</b>	<b>ASCRG ATTENDEES:</b> <b>Leisa Elder</b> – Vice President External Relations and Tenure Management <b>Tony Knight</b> – Vice President MGP Joint Venture <b>Simon Gossmann</b> - Groundwater Manager <b>Dave Munro</b> – Front End Development Manager <b>Tania Marshall</b> – A/Senior Community Officer, Dalby  <b>Ian Hayllor</b> – Landholder <b>John Hughes</b> - Project Officer CSG Compliance Unit; DNRM <b>Cr Charlene Hall</b> - Councillor, Western Downs Regional Council <b>Cr Nancy Somerfield</b> - Councillor, Toowoomba Regional Council <b>Jordan Peach</b> – Australian Lot Feeders Association, Mort & Co <b>Matt Paul</b> – Policy Director, APPEA <b>Geoff Hewitt</b> – Landholder <b>Lyn Nicholson</b> Chair, Basin Sustainability Alliance
	MINUTES: <b>Tania Marshall</b> (Secretary)
	<b>APOLOGIES:</b> <b>Graham Clapham</b> – Central Downs Irrigators Ltd <b>Cr Ray Jamieson</b> – Councillor, Western Downs Regional Council <b>Mary O'Brien</b> – Regional Manager, Cotton Australia <b>Sarah Due</b> – Regional Manager, Agforce
	<b>RESIGNATION:</b> <b>Anna Stephenson</b> – Manager Government and Community, University of Southern Queensland
<b>CHAIR:</b>	<b>Leisa Elder</b> , Vice President External Relations and Tenure Management
<b>DISCLOSURES</b>	None recorded

		ACTION/SUGGESTIONS
<b>ITEM 1</b>	<b>Welcome &amp; Quorum achieved for ASCRG committee – Leisa Elder</b>	
<b>ITEM 2</b>	<b>Safety moment – Safe Hands – Simon Gossmann</b>	
<b>ITEM 3</b>	<b>Minutes of previous meeting – Leisa Elder</b>  Minutes were passed and agreed.	<b>TM to add Minutes to the web site</b>
<b>ITEM 4</b>	<b>Arrow Energy Update – Leisa Elder</b>  <b>CEO Changeover –</b> <ul style="list-style-type: none"> <li>Leisa Elder advised that Andrew Faulkner (CEO) had left Arrow to become the Managing Director of Shell Brunei. This was an expected move as part of his 5 year tenure as a Shell employee.</li> <li>Mike Grieve is now the CEO and Mike Ward will act as interim Project Director.</li> </ul> <b>Cost Focus –</b> <ul style="list-style-type: none"> <li>Arrow's cost focus is a key driver in negotiations for potential collaboration, in combination with efforts in-house to improve cost efficiencies.</li> <li>Leisa Elder advised that other companies had been through up to 4 rounds of redundancies and Origin were proceeding with redundancies this week, reflecting both external cost pressures and current project phasing (i.e end of construction)</li> </ul> <b>Recent media reports – Arrow LNG Facility –</b> Shell recently announced that Arrow would not proceed with an LNG Plant on Curtis Island. The media confused this with Arrow not proceeding with a project at all, which is incorrect. Arrow is continuing to look at collaboration, including in the downstream and would consequently be maintaining the land it has already purchased on Curtis Island.	

	<p><b>Bowen Basin Engagement –</b> Community engagement activities were being held across the Bowen Basin in the week commencing 2 March. The ‘Bowen Gas Project’ was currently 3 months into the front end engineering and design phase (FEED). The FEED work is being undertaken by the Clough Amec joint venture, under contract to Arrow. Leisa Elder advised there was a standing invitation to any members of the ASCRG and IFL Committees who wanted to visit our sites in Moranbah. Arrow’s Moranbah Gas Project in the Bowen Basin has been operating for 15 years, supplying gas to domestic users, and some of the sites have completed their life cycle and have been rehabilitated.</p>	
<p><b>ITEM 5</b></p>	<p><b>ASCRG Terms of Reference – Leisa Elder</b></p>	
	<ul style="list-style-type: none"> <li>• Leisa Elder suggested that the Terms of Reference and the membership of the committee be reviewed. Key changes were to adjust membership to reflect recent changes, and to make minor adjustments to wording of some clauses, ie:             <ul style="list-style-type: none"> <li>○ To remove Anna Stephenson, Manager Government and Community, University of Southern Queensland, who has resigned from the Committee</li> <li>○ Add Simon Gossmann as a permanent member</li> <li>○ Add Lyn Nicholson as representative of the Basin Sustainability Alliance</li> <li>○ Adjust Leisa Elder’s and Tony Knight’s titles to reflect their slightly modified roles within Arrow Energy Limited</li> <li>○ Section 9 – change wording to “advisory group”</li> </ul> </li> <li>• Nancy Sommerfield noted that the TOR stated if a member did not attend for 3 meetings without providing apologies that they would cease to be a committee member. Nancy wanted this scrutinised and adhered to. Geoff Hewitt seconded the request.</li> <li>• Geoff Hewitt advised that he did not think he should be on the committee any further as he was not a representative of a group and did not reside full time in the area. Charlene Hall suggested Geoff remain as an observer as his input to committee matters was valuable Nancy Sommerfield stated there should be a landholder on the committee.</li> <li>• John Hughes questioned whether the ASCRG and IFL committees should merge. Leisa Elder explained that the IFL committee was there to look at specific landholder issues and area wide planning.</li> <li>• Nancy Sommerfield suggested the IFL committee provide an update on their issues to the ASCRG committee.</li> <li>• Ian Hayllor suggested having a business representative on the ASCRG committee, possibly someone from the Chamber of Commerce.</li> <li>• John Hughes stated that from a government perspective they would be interested in the issues discussed in the IFL meeting. John Hughes suggested the Mining Petroleum and Land Access Manager, based in Dalby should be on the IFL Committee. Leisa Elder explained that the IFL committee discussed issues with individual landholders on the personal development on their land and possibly not appropriate to have someone from the department involved in discussions at that early point. Leisa Elder advised she would take this request on notice.</li> <li>• Ian Hayllor suggested that new members could be landholders who had development on their land and to look at groups who had an interest in the active areas with Daandine as an example. Committee was advised that Jordan Peach, as a representative of Mort &amp; Co Feedlot had 74 wells and one monitoring well on that property.</li> <li>• Leisa Elder suggested inviting Pat Weir to join the committee.</li> <li>• Geoff Hewitt suggested looking at another Agforce representative who may be able to attend more regularly.</li> <li>• Leisa Elder suggested inviting Cotton Australia to continue their membership and provide a delegate to each meeting.</li> </ul>	<p><b>Suggestions for new members to be circulated out of session via email.</b></p> <p><b>Leisa Elder to consider suggestion for DNRM member on IFL committee</b></p> <p><b>Suggestion – to approach Pat Weir to ask if he will consider joining the ASCRG.</b></p>
<p><b>ITEM 6</b></p>	<p><b>Research and Innovation – Tony Knight</b></p>	
	<p><b>Soil Column Testing –</b></p> <ul style="list-style-type: none"> <li>• Theten and Broadwater Farms are Arrow’s demonstration farms.</li> <li>• Arrow has undertaken soil column testing on Theten for the purpose of obtaining the soil absorption coefficient for cropping soils to model long term irrigation effects from using treated water from coal seams. Tony Knight explained that the testing was conducted by QUT’s Science and Engineering faculty. Tony advised that initial results showed no gravity flow through the 1m test column.</li> <li>• Geoff Hewitt asked over what time the samples were left for water to penetrate the soil. Geoff also questioned the purpose of the research. If the initial assumption was that water does not travel through the soil then this was</li> </ul>	<p><b>Tony Knight to provide further information on</b></p>

	<p>flawed. He stated that a landholder needs a percentage of loss of deep drainage to stop the build-up of salts. What Arrow is irrigating with is pure water.</p> <p><b>External Research - UQCCSG –</b></p> <ul style="list-style-type: none"> <li>• Research was currently being undertaken by University of Queensland Centre for Coal Seam Gas (UQCCSG). UQCCSG has membership from all 4 CSG proponents. Most research extends over 3 years. There are 2 advisory groups within the UQCCSG, the Strategic Advisory Group (SAG) and the Technical Advisory Group (TAG). The SAG decides research funding, based on review of proposals put forward by the TAG</li> <li>• One of the first research proposals the UQCCSG proposed was around research governance to ensure there was no bias in the research undertaken even though it was funded by the CSG proponents.</li> <li>• UQCCSG has also put together a database encompassing CSG research and development from both Australia and overseas. <a href="http://www.research.ccsq.uq.edu.au">http://www.research.ccsq.uq.edu.au</a></li> </ul> <p><b>GISERA –</b></p> <ul style="list-style-type: none"> <li>• Gas Industry Social &amp; Environmental Research Alliance is a CSIRO entity. QGC and Origin are members. Research that is undertaken is of a social and environmental nature.</li> <li>• There are some joint UQCCSG &amp; GISERA research projects.</li> <li>• Charlene Hall asked if research undertaken through GISERA had anything to do with the Wyoming research. Tony Knight advised there was some linked research (e.g. via CCSG's association with University of Texas).</li> <li>• UQCCSG was also undertaking some research on the key pieces of information that were needed to be communicated to the community and through what medium.</li> <li>• Ian Hayllor noted that research findings are not being fed back to those who are participating in the research.</li> <li>• Charlene Hall noted that feedback from the research needs to go back to the community and government. Some researchers are not providing a commitment to feed back to a particular forum.</li> <li>• John Hughes stated that DNRM worked with UQCCSG mainly regarding social performance.</li> <li>• Nancy Sommerfield stated that the GasFields Commission could be used as a vehicle to communicate with the community.</li> </ul> <p><b>Condamine Alliance – Dewfish Demonstration Reach</b> – a 110km stretch of Condamine River including tributaries. Research was in on irrigation screen trials, restoring of fish habitats, identification and removal of barriers to fish passage and landscape permeability.</p>	<p><b>the soil column testing, specifically to consider deep soil drainage.</b></p>
<p><b>ITEM 7</b></p>	<p><b>Domestic Gas Media and Arrow Energy Position – Leisa Elder</b></p>	
	<ul style="list-style-type: none"> <li>• LE referred to increased media regarding domestic gas price and availability (or reservation).</li> <li>• Domestic gas has historically been cheap, as it had to compete with coal fired power. Due to many domestic supply contracts being signed for long terms with very limited increase provisions, it is currently more expensive to extract gas than it is sold.</li> <li>• Arrow Energy currently has two domestic gas production fields, in the Surat and Bowen Basin's. Arrow also has tenure earmarked for domestic gas supply in the south east of Queensland. This area is known as the Bromelton State Development Area.</li> <li>• Nancy Sommerfield stated that the Bromelton State Development Area was also earmarked for a super landfill facility for the south east corner.</li> <li>• Matthew Paull noted that all proponents have stated they would make available some gas for domestic markets.</li> <li>• Leisa Elder noted that Arrow had ongoing long term contracts for the supply to the domestic gas market. All States except Western Australia have no policy on domestic gas reservation, and many commentators have correctly labelled reservation as a subsidy from one industry to another.</li> <li>• Tony Knight noted that 17% of electricity is generated from gas.</li> </ul>	
	<p><b>Joint Session with AIFL Committee</b></p>	
<p><b>ITEM 8</b></p>	<p><b>Arrow's Weed and Pathogen Management Program – Lavinnia Fiedler</b></p>	
	<ul style="list-style-type: none"> <li>• Lavinnia Fiedler provided information on Arrow Energy's new Weed and Pathogen Management program.</li> <li>• Geoff Hewitt questioned what the assessment of existing weeds included given that some weeds remain dormant in the soil.</li> <li>• Lavinnia Fiedler advised that Arrow work with the landholder and local government to determine what weeds are present in the area. There was a pre and post operations inspection undertaken of the site to determine a clear</li> </ul>	

	<p>management process.</p> <ul style="list-style-type: none"> <li>• Mike Ward advised the site is reviewed for 2 years post rehabilitation.</li> <li>• Jordan Peach asked if all contractors were carrying weed books.</li> <li>• Lavinnia advised that the program would continue to be rolled out and that all staff and contractors should be carrying weed books within the next 2 months.</li> <li>• Ian Hayllor commented that the policy was comprehensive and a very good program.</li> </ul>	
<p><b>ITEM 9</b></p>	<p><b>Development Update – Dave Munro</b></p>	
	<p>Dave Munro provided an update on the Bowen Gas Project (BGP) and the Arrow Bowen Pipeline (ABP)</p> <p><b>Bowen Gas Project:</b></p> <ul style="list-style-type: none"> <li>• Currently in FEED phase, with the view to submitting an FID proposal by the end of 2015.</li> <li>• Concept planning complete for phase one of the BGP.</li> <li>• Phase one infrastructure includes 500 wells and low pressure water and gas gathering pipelines; 4 field compression facilities (FCF) and medium pressure infield pipelines; and one central gas processing facility (CGPF) and the Arrow Bowen Pipeline.</li> <li>• Phase one also includes an accommodation village near the proposed CGPF</li> <li>• Construction workforce will peak in the second and third year of construction with up to 600-900 personnel.</li> <li>• Workforce will reduce over time to approximately 300 personnel.</li> </ul> <p><b>The Arrow Bowen Pipeline -</b></p> <ul style="list-style-type: none"> <li>• Pipeline will transport CSG from Moranbah to the Gladstone Gas Hub.</li> <li>• This will be approximately 428km of buried, high pressure steel pipeline.</li> <li>• Peak construction workforce approximately 700</li> <li>• Commissioning workforce approximately 10</li> <li>• Operational workforce approximately 15</li> <li>• Construction will be approximately 2 years</li> </ul> <p><b>Arrow's Surat Project:</b> Currently in the value improvement and collaboration focus stage with ongoing commercial discussions.</p> <p><b>Daandine Expansion Project (DDXP) –</b></p> <ul style="list-style-type: none"> <li>• Provides approximately 60% increase in Daandine's production capacity</li> <li>• Facilities include gas compressors, safety upgrades, export connection (hot tap to 3<sup>rd</sup> party pipeline)</li> <li>• Brine dam replacement and water treatment upgrade</li> <li>• Field infrastructure includes additional wells from multi-well pads, wellhead skids and gathering systems.</li> <li>• The process has included facility shutdowns to make safety upgrades and pre-install compressor tie-ins and to connect and commission the new compressors.</li> </ul> <p>Charlene Hall asked if the DDXP would mean more work for the town. Dave Munro advised DDXP would not increase local staffing. Charlene Hall requested the community be updated on Arrow's Surat Project possibly via the media.</p> <p>Ian Hayllor asked if Arrow were looking at a minimal disturbance model in the construction of its pipeline and stated that this would save money in rehabilitation post construction. Dave Munro said he would take this matter on notice and provide advice at future meetings.</p>	<p><b>Minimal disturbance on pipeline construction – DM to take on notice</b></p>
<p><b>ITEM 10</b></p>	<p><b>Make Good Process and Gearon Water Bore Update – Simon Gossman</b></p>	
	<ul style="list-style-type: none"> <li>• Simon Gossman provided update on bores in the Immediately Affected Area (IAA) as identified in the Underground Water Impact Report. 12 IAA bores were identified on Arrow tenure. Of 9 assessed, 4 were assessed as into the Walloon Coal Measures. The make good process was explained.</li> <li>• Ian Hayllor questioned how easy it was to determine if the bore was in the Walloon or Springbock measures.</li> <li>• Simon Gossman explained that if it was possible to dip the bore to gauge the depth of the bore this was done. Then a desktop survey would be undertaken given the geological data known for the area and the location of the bore could be determined.</li> <li>• Ian Hayllor suggested that an information sheet could be created on how the aquifer location of a bore is determined.</li> <li>• Simon Gossman provided current information on the Gearon water bore. Providing history of the bore dating back to when it was drilled in 1936 and the process going forward to resolve the issue.</li> </ul>	

<b>ITEM 11</b>	<b>Any Other Business</b>	
	Nil	
<b>ITEM 12</b>	<b>Agreed Outcomes, Actions and Deliverables</b>	
	A fact sheet on the rehabilitation process and the bore assessment process was requested	<b>Fact sheet on the rehabilitation process and bore assessment process</b>
<b>ITEM 13</b>	<b>2015 Meeting Dates</b>	
	Next meeting 18 June 2015 – USQ Toowoomba	<b>TM to forward meeting reminder</b>

There being no further business, the meeting was closed at 1.55pm.

CONFIRMED AS A TRUE AND CORRECT RECORD.

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Chairperson